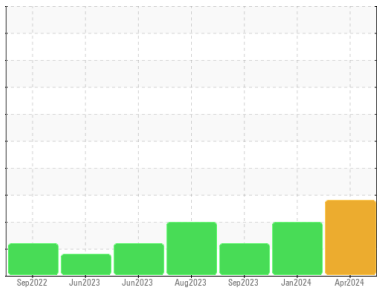
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
WALPOLE
Machine Id
943 - WALPOLE
Component
Front Differential
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear
The iron level is abnormal. All other component wear rates are normal.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0934499**	WC0900920	WC0853876
Sample Date		Client Info		**24 Apr 2024**	18 Jan 2024	21 Sep 2023
Machine Age	mls	Client Info		**220893**	184102	144700
Oil Age	mls	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	▲ **580**	431	343
Chromium	ppm	ASTM D5185m	>10	**6**	5	4
Nickel	ppm	ASTM D5185m	>10	**2**	2	2
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**8**	5	4
Lead	ppm	ASTM D5185m	>25	**6**	8	6
Copper	ppm	ASTM D5185m	>100	**62**	62	57
Tin	ppm	ASTM D5185m	>10	**7**	7	6
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**61**	62	62
Barium	ppm	ASTM D5185m		**2**	1	0
Molybdenum	ppm	ASTM D5185m		**0**	<1	<1
Manganese	ppm	ASTM D5185m		**13**	11	7
Magnesium	ppm	ASTM D5185m		**192**	195	200
Calcium	ppm	ASTM D5185m		**17**	11	6
Phosphorus	ppm	ASTM D5185m		**1758**	1718	1700
Zinc	ppm	ASTM D5185m		**17**	11	7
Sulfur	ppm	ASTM D5185m		**29235**	23663	26710

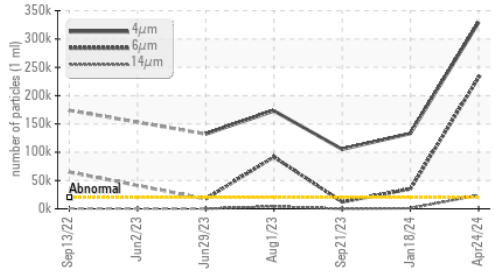
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	**55**	47	41
Sodium	ppm	ASTM D5185m		**6**	5	3
Potassium	ppm	ASTM D5185m	>20	**4**	4	<1
Water	%	ASTM D6304	>.2	**0.059**	0.043	0.014
ppm Water	ppm	ASTM D6304	>2000	**597**	436	147.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **329338**	▲ 133110	▲ 105127
Particles >6µm		ASTM D7647	>5000	▲ **232309**	▲ 35163	▲ 11993
Particles >14µm		ASTM D7647	>640	▲ **24028**	▲ 1012	103
Particles >21µm		ASTM D7647	>160	▲ **2910**	▲ 196	19
Particles >38µm		ASTM D7647	>40	**11**	8	1
Particles >71µm		ASTM D7647	>10	**0**	1	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **26/25/22**	▲ 24/22/17	▲ 24/21/14

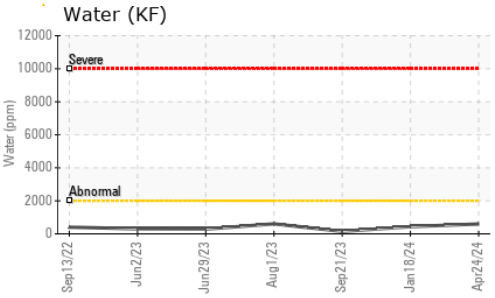
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.30**	0.43	0.43

OIL ANALYSIS REPORT

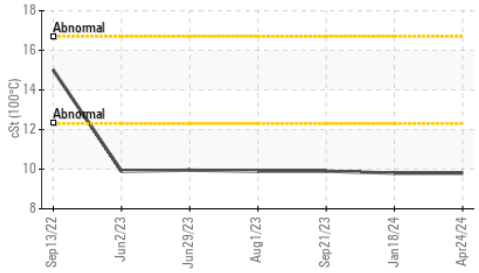
Particle Trend



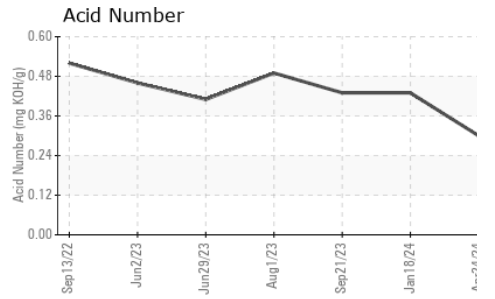
Water (KF)



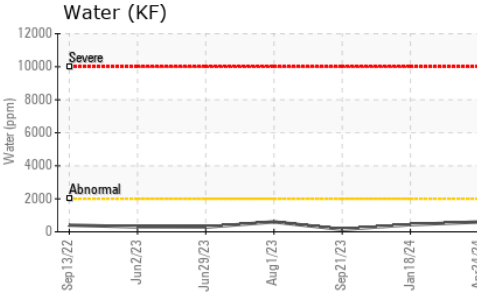
Viscosity @ 100°C



Acid Number



Water (KF)



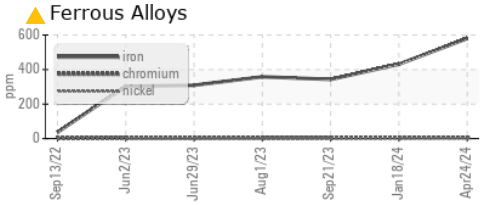
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**53.9**	53.9	54.1
Visc @ 100°C	cSt	ASTM D445		**9.8**	9.8	9.9
Viscosity Index (VI)	Scale	ASTM D2270		**169**	169	171

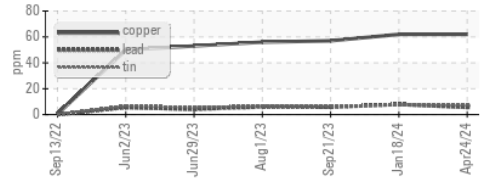
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS

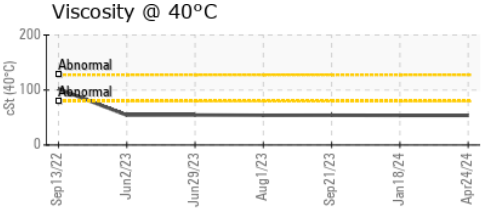
Ferrous Alloys



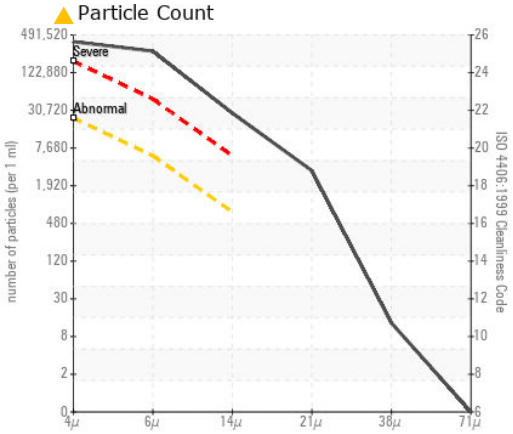
Non-ferrous Metals



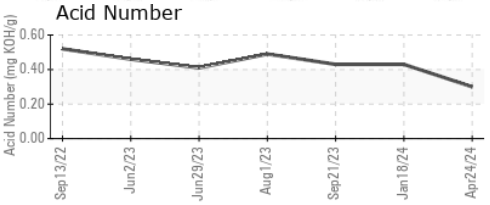
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934499 **Received** : 14 May 2024
Lab Number : 06179396 **Tested** : 16 May 2024
Unique Number : 11030722 **Diagnosed** : 16 May 2024 - Angela Borella
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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